



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/673,260

09/30/2003

Koichiro Mitsui

.4635-003

2073

22429

7590

04/13/2006

LOWE HAUPTMAN GILMAN AND BERNER, LLP
1700 DIAGONAL ROAD
SUITE 300 /310
ALEXANDRIA, VA 22314

EXAMINER

HAND, MELANIE JO

ART UNIT

PAPER NUMBER

3761

DATE MAILED: 04/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/673,260

Applicant(s)

MITSUI ET AL.

Examiner

Melanie J. Hand

Art Unit

3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments, see Remarks, filed January 23, 2006 with respect to the rejection(s) of claim(s) 1-3 and 17 under 35 U.S.C. 102 and 4-7 under 35 U.S.C. 103 have been fully considered and are persuasive. Applicant's arguments with respect to the objection to claims 8-16 are persuasive. Therefore, the objection and rejection have been withdrawn and claims 8-16 are examined herein on their merits. However, upon further consideration, a new ground(s) of rejection is made in view of a newly found prior art reference and a different interpretation of a previously presented reference.

Claim Objections

Claim 15 is objected to because of the following informalities: the phrase "said attaching portion" lacks sufficient antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-3, 8, 9-13, 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Gesp et al (WIPO Publication No. WO 1997/28774).

With respect to **Claims 1,2,3**: Gesp teaches a diaper 10 with layered assembly 12 comprising a top sheet 28, a backsheet 30 and absorbent core 26 enclosed within said topsheet and backsheet. As can best be seen from Fig. 1, diaper 10 also has side flaps with longitudinal

Art Unit: 3761

edges 22 and 24. (Page 8, lines 17-20, 23-26). Gesp teaches tabs 32 that comprise securement portions 50, 52 and 54 (Page 8, lines 26-31) Gesp teaches that securement portions 50,52 are comprised of adhesive and securement portion 54 is comprised of a multiplicity of hook elements 54b mounted on substrate 54c. (Page 11, lines 1-6) Securement portion 54 is therefore capable of engaging either of securement portions 50,52 for the purpose of temporary fixing of the tab, however as can best be seen in any of the Figures there exists a zone between securement portions 54 and 50,52 that is comprised only of nonwoven tape substrate surface 48b with no fastening means mounted thereon. Such a zone therefore would constitute a non-engaging region with respect to region 54, thus anticipating claim 2. Gesp teaches that distal end 36b of attachment element 36 is free of fastening means and therefore is capable of functioning as a thumb portion, thus anticipating claim 3. Since Gesp teaches that release element 42 is comprised a release substrate 56 comprised of materials that are also typically used to fabricate diaper backsheets (Page 12, lines 4-11), and that the peel strength of joint 68 with respect to release element 42 is relatively low compared to other portions of tab 32, Examiner concludes herein that the peel strength of joint 68 with respect to landing zone 34 will also be relatively lower than the rest of tab 32, resulting in regions of differing peel strength within tab 32 with respect to landing zone 34.

With respect to **Claim 8**: Gesp teaches that securement portion 54 is comprised of a multiplicity of hooks 54b (Page 11, lines 1-4), said hooks being the male component of a hook-loop fastening system.

With respect to **Claim 9,13**: Gesp teaches attachment elements 36 of tabs 32 that are attached to the diaper in the area of side edges 22,24. Elements 36 are coated with adhesive on their

Art Unit: 3761

inner faces 40 in areas corresponding to securement portions 50,52 that are capable of at least temporarily engaging securement portion 54. The substrate 32 upon which the securement portions 50,52,54 lie is capable of being folded about imaginary fold line F shown in Fig. 2 that is defined by either of side edges 22,24 to engage securement portions 50,52. (Page 10, lines 16-21) Gesp teaches that the tabs 32 operate as extensible diaper-side waistbands. (Page 9, line 35 – Page 10, line 1) Examiner asserts that Gesp is teaching that the tabs are thus attached to the inner sides of the diaper at side edges 22,24.

With respect to **Claim 10**: Although Gesp does not teach that the tabs 32 are attached in said folded configuration, said tabs are nonetheless capable of being folded into such a configuration and thus can be attached to the diaper in such a configuration during assembly. It would be obvious to one of ordinary skill in the art to attach the tabs in such a manner as it merely constitutes an alternate configuration for the tabs 32 upon attachment that does not destroy the function of the instant invention. In the instant case substitution of equivalent methods requires no express motivation, as long as the prior art recognizes equivalency, *In re Fount* 213 USPQ 532 (CCPA 1982); *In re Siebentritt* 152 USPQ 618 (CCPA 1967); *Graver Tank & Mfg. Co. Inc. v. Linde Air Products Co.* 85 USPQ 328 (USSC 1950).

With respect to **Claim 11**: Gesp teaches a fastening configuration for tabs 32 by reference to U.S. Patent 4,066,081 to Schaar. Schaar teaches fasteners 50 comprising tape strips 52 attached at one end 62 to backing sheet 26 of pad assembly 22. ('081, Col. 2, lines 45-47)

With respect to **Claims 12,17**: Gesp teaches diaper 10 with fastener tabs 32 comprising securement portions 52 and 54. Securement portion 52 is comprised of pressure sensitive adhesive and is substantially incapable of engaging hook portion 54.

With respect to **Claim 16**: The side panels of the diaper taught by Gesp are defined by those portions of the topsheet and backsheet that extend beyond the absorbent core in the waist regions of the diaper, and are therefore comprised of an elastic material (backsheet) attached to a nonwoven fabric (topsheet). (Page 1, lines 15-20, Page 8, lines 17-22)

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 4-7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gesp ('774) in view of Loescher et al (European Patent No. EP 974,326 (IDS))

With respect to **Claims 4 and 5**: Gesp does not teach an engaging force for landing zone 34 with respect to hook portion 54. Loescher teaches a diaper closure system comprising tape tabs 10 comprising male fastening element 15 that engages female fastening element 100. (Fig. 1) Male fastening element 15 is comprised of hooks and female fastening element 100 is comprised of backing 101 and fibrous web structure 102 with a release-treated exposed surface 103. Loescher teaches that the peel strength upon engagement of the adhesive surface 19 of tab 10 with release surface 103 of structure 102 is less than 1.2 N/25mm. (Paragraph 0007, lines 24-26) Loescher teaches that a peel strength greater than 1.2 N/25mm results in contamination of the adhesive fastening surface 19 of tab 10 with fibers from surface 102,

Art Unit: 3761

compromising the adhesive ability of surface 19 (Paragraph 0058, line 56 – Paragraph 0059, line 2), therefore it would be obvious to one of ordinary skill in the art to modify the tabs 32 taught by Gesp to have a peel strength with respect to landing zone 34 of less than 1.2 N/25mm as taught by Loescher.

With respect to **Claims 6,14**: As stated with respect to Claims 4 and 5, Loescher teaches that the adhesive surface 19 of tabs 10 (considered herein to be a non-engaging region with respect to hook elements 15) has a peel strength of less than 1.2 N/25mm with respect to release surface 103 of female element 100. Since this measurement corresponds to a peel strength between two regions that are substantially engageable with one another, it is concluded herein that the peel strength between hook elements 15a and securement portions 50,52, two regions concluded previously herein to be non-engageable in a permanent capacity, will be less than that between securement portions 50,52 and release surface 103, and therefore no greater than 1.2 N/25mm, which is considered low per Applicant (see Specification, Page 24, lines 4-10) and therefore satisfies the limitation set forth in Claims 6 and 14.

With respect to **Claim 7**: Gesp does not teach a percentage of area of the hook elements 54b that is occupied by their engaging portions, interpreted herein to be the “heads” of said hooks. Though Applicant has not specified clearly what “the entirety of said hook member” is defined by, Examiner is interpreting this phrase as referring to the total area of the hook member. Loescher teaches that the heads of hook elements 15a are of essentially uniform height (Paragraph 0030, Page 6, lines 52,53) and have an average maximum diameter to average maximum thickness ratio in the range of 1.5:1 to 12:1. (Paragraph 0030, Page 7, lines 1,2) A ratio of 1.5:1 translates to a percentage area occupied by engaging portion of 40%, and a ratio

Art Unit: 3761

of 12:1 translates to an engagement portion area percentage of 7%. Loescher teaches that the prior art hooks of various shapes are also acceptable (Paragraph 0029, lines 50,51), therefore in the instant case substitution of equivalent methods requires no express motivation, as long as the prior art recognizes equivalency, *In re Fount* 213 USPQ 532 (CCPA 1982); *In re Siebentritt* 152 USPQ 618 (CCPA 1967); *Graver Tank & Mfg. Co. Inc. v. Linde Air Products Co.* 85 USPQ 328 (USSC 1950).

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gesp ('774) in view of Tanzer et al (U.S. Patent No. 6,730,069).

With respect to Claim 15: Gesp does not teach an opening in securement portion 54 or distal end 36b. Tanzer teaches a fastener comprising a first flexible layer 72 comprised of a stretchable laminate of nonwoven material and a second flexible layer 78 attached to the first flexible layer. The first flexible layer contains islands of fastener material and the second flexible layer contains openings 80 corresponding to the location and size of each island. Tanzer teaches that the openings allow for exposure of the fastener island 64 therefore it would be obvious to one of ordinary skill in the art to modify the distal end 36b of the tab fastener taught by Gesp to contain openings as taught by Tanzer. ('069, Col. 9, line 67, Col. 10, lines 1,2, Col. 12, lines 57-65)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie J. Hand whose telephone number is 571-272-6464. The examiner can normally be reached on Mon-Thurs 8:00-5:30, alternate Fridays 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Melanie J Hand
Examiner
Art Unit 3761

MJH

TATYANA ZALUKAEVA
SUPERVISORY PRIMARY EXAMINER

